

Diabetes

is a chronic disease for which a person has either a shortage of insulin or a decreased ability to use insulin. Insulin is a hormone secreted by the pancreas that is needed to convert sugar, starches and other food into energy needed for daily life.

What is diabetes?

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. There are two major types of diabetes:

- *Type 1* - A disease in which the body does not produce any insulin, most often occurring in children and young adults. People with type 1 diabetes must take daily insulin injections to stay alive. Type 1 diabetes accounts for 5 to 10 percent of diabetes.
- *Type 2* - Type 2 diabetes is the most common form of the disease. It is a metabolic disorder resulting from the body's inability to make enough, or properly use, insulin. Type 2 diabetes accounts for 90 to 95 percent of diabetes. Type 2 diabetes is nearing epidemic proportions in the United States, due to an increased number of older people, and a greater prevalence of obesity and sedentary lifestyles.⁵²

Why is diabetes an important health issue for Detroiters?

With its complications -- blindness, kidney disease, amputations, heart attack and stroke -- diabetes is the seventh leading cause of death (sixth-leading cause of death by disease) in the United States. The cause of diabetes is unknown, although both genetics and environmental factors such as obesity and lack of exercise seem to increase risk. Other risks for diabetes include age greater than 40, non-White race, a diet high in fats and low in fruits, vegetables and fiber, and a family history of diabetes.

Though it can be controlled, diabetes is a chronic disease that has no cure. According to the American Diabetes Association, 16 million people in the United States have diabetes, and 5 million of those individuals have not been diagnosed. Approximately 2.3 million or 10.8% of all Black s have diabetes, however, one-third of them do not know it. Blacks are 1.7 times more likely to have diabetes, than Whites. Twenty-five percent of Blacks between the ages of 65 and 74 have diabetes. One in four Black women over 55 years of age has diabetes.

Once an individual has been diagnosed with diabetes, proper management is critical. A diabetic person may experience several serious health complications such as: blindness, kidney disease, heart disease and stroke, nerve disease and amputations, and sexual dysfunction. Blacks experience higher rates of at least three of those complications: blindness, amputation and kidney failure.⁵³

Though type 2 diabetes has generally been diagnosed among adults, a growing number of children and adolescents are developing this kind of diabetes. This is of particular concern for the Detroit population, as children of Black, Hispanic, and Native American race/ethnicity have been diagnosed more often. Recent reports indicate that 8-45% of children with newly diagnosed diabetes have type 2 diabetes. However, since type 2 diabetes in children and adolescents is a relatively new phenomenon, accurate statistics regarding the number of cases have not been generated.

There are some characteristics that are more common among children diagnosed with type 2. The emerging epidemic of type 2 diabetes in children parallels an increasing prevalence of

obesity.⁵⁴ As many as 80% of the children who have been diagnosed with type 2 diabetes were overweight at the time of diagnosis. Most of the children diagnosed have been older than 10 years of age and are in puberty, though younger cases have been documented. Children that have been diagnosed have also had family histories of type 2 diabetes.⁵⁵

Diabetes in Detroit

Diabetes is one of the leading diagnoses for preventable hospitalizations in the city and statewide. Consistent with the average annual rate for years 1991-1998, diabetes accounted for about 10.8 of all 1999 preventable hospitalizations per 10,000 residents in the state of Michigan. For Detroit, diabetes accounted for 25 preventable hospitalizations per 10,000 residents. For residents aged 65 and older, the preventable hospitalization rate for diabetes in Detroit (52 per 10,000 residents) doubles the rate for Michigan (24 per 10,000 residents).⁵⁹

The Michigan Department of Community Health estimates that 436,000 Michigan residents have been diagnosed with diabetes, of which 60,150 are Detroit residents. National studies estimate that as many as 213,400 additional Michigan residents, including 23,220 Detroiters, are unaware that they are diabetic.⁵⁶

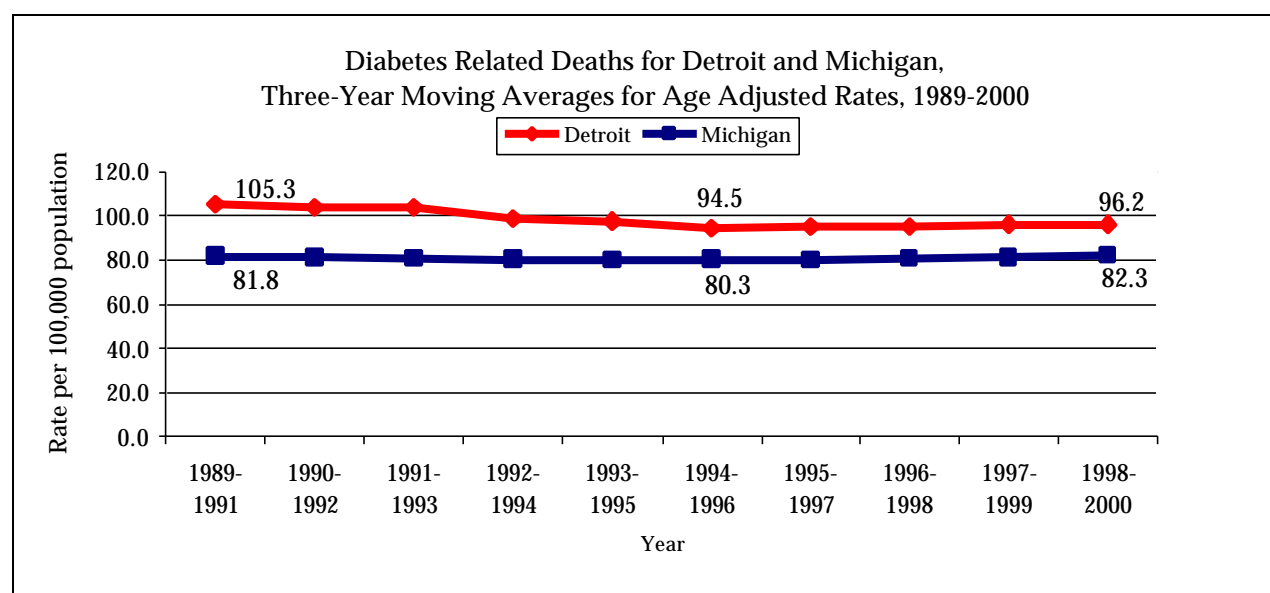


Figure 28

As represented by the chart above, the 1989-1991 three-year average rate for Detroiters exceeded the state rate by more than 20 individuals per 100,000 in the respective populations. Over the decade, the state rate slightly declined and then hovered at a fairly consistent rate until 1997-1999 (81.3) where there is a slight increase from 1996-1998 (80.5). Detroit's rate dropped considerably over the decade as well, but also experienced increases from 1996-1998 (95.0 deaths per 100,000 Detroit residents) to 1997-1999 (96.2). From 1998-2000, 96 persons per 100,000 Detroit residents died from causes related to diabetes while 82.3 per 100,000 Michigan residents died.

HP2010 has several objectives related to diabetes including the prevention of diabetes and reducing cases to 2.5 new cases per 1,000 population per year. The reduction of the diabetes death rate and of diabetes related deaths among those who have diabetes are objectives as well. The reduction of morbidity related to diabetes and the improvement of management are evident in several objectives.